



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,831	10/30/2003	James T. Beaucaire	D5453	9115

30409 7590 01/04/2006

INTERNATIONAL ENGINE INTELLECTUAL PROPERTY COMPANY  
4201 WINFIELD ROAD  
P.O. BOX 1488  
WARRENVILLE, IL 60555

EXAMINER
----------

MCCALL, ERIC SCOTT

ART UNIT	PAPER NUMBER
----------	--------------

2855

DATE MAILED: 01/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/696,831

Applicant(s)

BEUCAIRE ET AL. 

Examiner

Eric S. McCall

Art Unit

2855

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-9,11,12,14-16 and 18-20 is/are rejected.
- 7) ☒ Claim(s) 2,10,13 and 17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**METHOD AND APPARATUS FOR INDICATING A  
POTENTIAL FLUID FILTER PROBLEM**

**NON-FINAL OFFICE ACTION**

In response to the Applicant's Request for Continued Examination with amendment dated Nov. 17, 2005.

**CLAIMS**

**35 U.S.C. § 102**

In response to the Applicant's amendments to the claims, the rejection of claims 1, 2, 4-10, 12-17, 19, and 20 under 35 U.S.C. 102(a) as being anticipated by Mazet (6,672,147) has been overcome.

35 U.S.C. § 103

In response to the Applicant's amendments to the claims, the rejection of claims 3, 11, and 18 under 35 U.S.C. 103(a) as being unpatentable over Mazet (6,672,147) in view of Amano et al. (2004/0060343) has been overcome. However, the following applies:

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-9, 11, 12, 14-16, and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over van Nieuwstadt et al. (6,397,587).

With regards to claim 1, van Nieuwstadt et al. suggest a method comprising the steps of:  
obtaining (42) a measured pressure near a filter (12) in an internal combustion engine ;  
determining a value based on engine speed and engine load (steps 52-66 of Fig. 2 and col. 3, lines 48-57);  
comparing the measured pressure to the value, yielding a compared pressure (Fig. 2, step 67); and

when the compared pressure exceeds an established value, indicating that a potential filter problem is present (Fig. 2, step 68).

van Nieuwstadt et al. teach the filter being that of a diesel particulate filter (12) but fail to teach the filter being that of a fluid filter as claimed.

However, it would be obvious to one having ordinary skill in the art armed with said teaching to perform the method of van Nieuwstadt et al. on a fluid filter as claimed.

The motivation being that the use of fluid filters within an engine (as taught by van Nieuwstadt et al.) is quite common and thus need monitoring just as does an air filter to determine the proper operation thereof. Furthermore, there is no evidence in the van Nieuwstadt et al. teaching that the method thereof would not operate on a fluid filter.

With regards to claim 3, van Nieuwstadt et al. suggest activating a timer based on an indication of the presence of a potential fluid filter problem (Fig. 2, step 56).

With regard to claims 5 and 6, van Nieuwstadt et al. suggest the pressure being taken near the filter and thus near an inlet or outlet thereof.

With regards to claim 7, claim 7 closely parallels claim 1 and thus is rejected for the same reasoning as presented above with respect to claim 1.

With regard to claims 8 and 9, van Nieuwstadt et al. suggest the pressure being taken near the filter and thus near an inlet or outlet thereof.

With regards to claim 11, van Nieuwstadt et al. suggest activating a timer based on an indication of the presence of a potential fluid filter problem (Fig. 2, step 56).

With regards to independent claim 14, much like the independent claims 1 and 7 van Nieuwstadt et al. suggest an apparatus comprising:

a pressure sensor (42) arranged and constructed to measure a pressure near a filter (12) of an internal combustion engine; and

an engine control module arranged and constructed to determine a value based on engine speed and engine load and to compare the value to the measured pressure, and based on results of the comparison, to indicate a warning condition for the filter (Fig. 2 and col. 3, lines 48-57).

With regards to claim 15, van Nieuwstadt et al. suggest the pressure being taken near the filter and thus near an inlet or outlet thereof.

With regards to claim 16, the teaching of van Nieuwstadt et al. is interpreted as suggesting a display for indicating the condition of the monitored filter as claimed since the purpose of the teaching is to monitor the condition of the filter and thus the condition at one

point and time will be “displayed”. The Examiner notes that the claim does not set forth who or what the condition is displayed to.

With regards to claim 18, van Nieuwstadt et al. suggest a timer arranged to be activated based on an indication of the presence of a potential fluid filter problem (Fig. 2, step 56).

With regard to claims 19 and 20, van Nieuwstadt et al., at a minimum, inherently suggests that a potential filter problem is obstruction, restriction, or the clogging thereof which in return causes a decrease in engine performance.

*Allowable Subject Matter*

Claims 2, 10, 13, and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims because the prior art fails to teach or suggest the radio frequency transmitter of claim 13 and the fluid temperature as claimed in claims 2, 10, and 17.

**CITED DOCUMENTS**


The Applicant’s attention is directed to the enclosed “PTO-892” form for the documents made of record at the time this office action.

**CONTACT INFORMATION**

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Eric S. McCall whose telephone number is (571) 272-2183.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Eric S. McCall  
Primary Examiner  
Art Unit 2855  
Dec. 29, 2005